REMARKS

Following entry of the amendment, claims 1-6, 9, 10, 18, 19, and 22-28 will have been canceled without prejudice or disclaimer of applicant's right to pursue those claims in an appropriate continuing or divisional application. Claims 7, 11, 20, and 21 will have been amended.

Applicant submits that the claims that remain pending in this application are in condition for allowance for the following reason:

- Claims 20-21 have been indicated by the Examiner as allowable if rewritten in independent form. Applicant has rewritten these claims in independent form.

- Claim 7-8 have been indicated by the Examiner as allowable (subject to an indefiniteness rejection under section 112), if rewritten in independent form. Applicant has rewritten claim 7 in independent form (claim 8 is dependent on claim 7, and thus does not require rewriting). Additionally, applicant has addressed the section 112 by way of the remarks below and by amendment to claim 7.

- Claims 11-17 have not specifically been indicated by the Examiner to be allowable, but are subject only to the section 112 rejection, which has been addressed below and by way of amendment to claim 11.

Regarding section 112 rejection, the Examiner finds that claim 1 (whose language has now been substantially incorporated into claim 7) is unclear to the extent that claim 1 calls for a counter's value to be compared with a recorded counter value, since, according to the Examiner, "the counter's value is the recorded counter value" (see Office Action, paragraph 6). Additionally, the Examiner finds that a similar issue exists with respect to claim 11. Applicants respectfully submit that the Examiner has misunderstood the relationship between the counter's value and the recorded counter value.

Applicants note that the Examiner has not quoted the relevant portion of claim 1. It is not merely a "counter value" that is compared with the "recorded counter value," but rather a "current counter value." It is clear from the language of original claim 1 (now part of claim 7) that the counter value can change each time a particular mapping cache is flushed ("updating said counter each time the first one of the plurality of mapping caches is flushed"), but the value of that counter is recorded in response to a change in an address translation map

("recording said counter's value in response to a change in the address translation map"). Moreover, since the claims are not limited to a particular temporal sequence of events, and a mapping cache can be flushed more than once, there is no guarantee that a counter's current value will, at any given point in time, be the same as the recorded counter value. Thus, since the counter can be updated independently of the recording of its value, it is possible for the recorded counter value and the current counter value to be different. In view of the fact that these values can be different, there should be nothing unclear about comparing the two values.

The foregoing situation – in which the current counter value may be different from the recorded value – is described at length in the specification. As explained in the specification in the summary of the invention at paragraph 0007:

> For each TLB, a counter is maintained, and every time a TLB is flushed, the counter is incremented. ... When a triggering event occurs, the values of any relevant counters are recorded after the triggering event has completed. ... When the results of a triggering event are to be used, the stored counter values are compared with the current counter values, in order to determine which (if any) relevant TLBs might not have been flushed since the triggering event. If any relevant TLBs have counter values that match their recorded value, all such TLBs are flushed in the conventional way.

This procedure is described in greater detail, at least at paragraphs 0057-0058 of the specification. While the claims are not limited to the specification, it is clear from the claims, as well as from the description of example embodiments in the specification, that the recorded value of the counter and the current value of the counter may be different, and a comparison between these values can determine whether a TLB (and/or mapping cache) needs to be flushed.

While applicants believe that claim 1 is clear both in its own right and in view of the specification, applicants have added to claim 7 (which incorporates substantially the language of claim 1) the language "recording said counter's value in response to a change in the address translation map, whereby a recorded counter value is stored" (where the underlined language indicates the portion that did not appear in original claim 1). This language (which, in view of the above-cited portions of the specification, does not constitute new matter) makes clear that a recorded counter value is created in response to a change in an address

translation map, which may be a different event from the flushing of a mapping cache that triggers a counter update. This addition to the claim language makes even more clear that the current counter value and the recorded counter value can differ from each other. (Of course, they could also be the same, but whether they are the same or different at any given point in time is determined by the "comparison" mentioned in claim 7.)

Additionally, applicants have amended claim 11 (by deleting the word "current" in a particular context), which even more particularly points out the counter value that is being compared. In particular, it is clear from the language of claim 11, as amended, that the counter's value is recorded in response to a particular event, and that the recorded value is, at some point in time, compared to the counter's current value (i.e., the counter's value at the time of the comparison).

Applicant has not modified the language from claim 18 that has been carried through to claims 20 and 21 (except to delete the superfluous phrase "has been modified," which was a typographical error not affecting the substance of original claim 18); rather, applicant submits that claims 20 and 21 are sufficiently definite to meet the standards of section 112, in view of the above-cited explanation from the specification explaining how a counter value is compared to a recorded counter value.

In view of the foregoing, applicants submit that all grounds of rejection have been addressed, and that this case is now in condition for allowance.

Date: January 6, 2006

Peter M. Ullman
Registration No. 43,963

Woodcock Washburn LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439